GE
Measurement & Control Solutions

ISOVOLT X-ray Tubehousing

ISOVOLT 320 M2 / 0.4 - 1.0 HP

Application

Radiographic and radioscopic inspections of welds and castings.

Features

- Direct radiating tube with double focus, bipolar, oil-cooled anode, axial high voltage connections
- Metal-ceramic tube with tungsten anode and Beryllium window
- Compatible with X-ray equipment of the ISOVOLT series
- Produced under ISO 9001 certified quality management system

Options

- Centering and collimator attachment with laser centering device
- Tube yokes

Technical Data

	Large focal spot	Small focal spot
Maximum tube voltage	320 kV	
Maximum anode dissipation	1800 W	800 W
Tube current at max. tube voltage	5.6 mA	2.5 mA
Focal spot size (EN 12 543)	1.0 mm	0.4 mm *)
Emergent beam angle	30° x 40° asymmetric (see drawing)	
Inherent filtration	3 mm Be + 2 mm Al, removable	
High voltage connection	2 Plug sockets for rubber cone plugs R24	
Cooling oil flow rate	min. 14 l/min	
Cooling oil temperature	max. 50° C	
Cooling oil pressure	max. 6 bar	
Weight (with optional cable quick-lock)	51 kg (112.4 lbs)	
Dimensions	see drawing	

*) Deviation from EN12543-2: evaluation of the focal spot based on 25% threshold

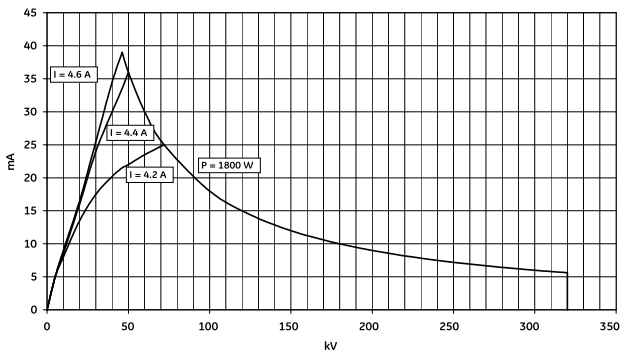
Dose Rate within the Central Beam

The generation of radiation in an X-ray tube solely depends on the operation values, not on the make.
The dose rate relevant in practice and suitable for calculations of radiation protection values is defined by national standards; thus the dose rate of the tubehousing ISOVOLT 320 M2 /0.4 - 1.0 HP, measured at a distance of 1 m from the focal spot, amounts to 11.39 Sv/h at maximum tube voltage and maximum anode dissipation.

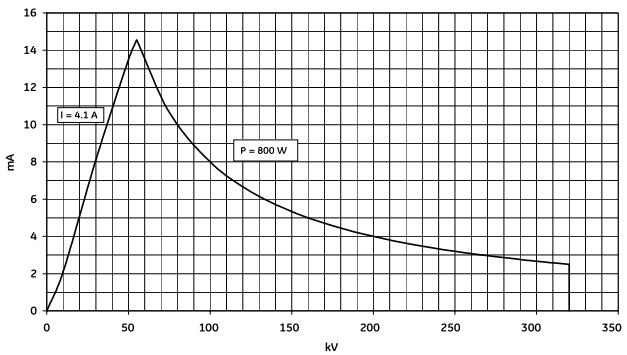
This value must not be used to assess biological effects.

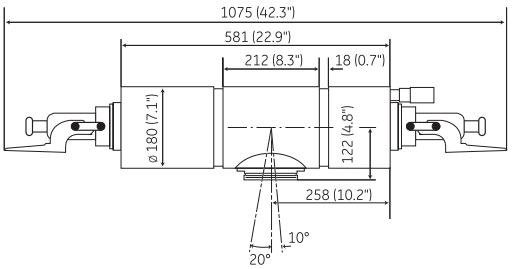
The dose rate of the leakage radiation is < 5 mSv/h (0.5 rem/h), certified by PTB.

Focal Spot Size d = 1.0 mm



Focal Spot Size d = 0.4 mm





www.ge-mcs.com/x-ray

GEIT-30169 EN (10/14)

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